DOCUMENT RESUME

ED 319 160 EC 230 847

AUTHOR Hedberg, Natalie L.; And Others
TITLE The Challenge of Collecting Stories from Language Disabled Preschool Children.
PUB DATE Nov 89
NOTE 9p.; Paper presented at the Annual Meeting of the American Speech-Language-Hearing Convention (St. Louis, MO, November 17-20, 1989).
PUB TYPE Reports - Evaluative/Feasibility (142) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Comparative Analysis; *Data Collection; Factor Analysis; *Language Handicaps; Preschool Education; Psychological Evaluation; Research Methodology; *Story Telling; *Testing Problems; Test Reliability; *Test Validity
IDENTIFIERS *Story Schema; *Story Telling By Children

ABSTRACT

This study examined efficacy of different story collection procedures with normally developing (N=10) and language disordered (N=6) preschool children. Factor analyses probed such possible interfering factors as home vs. school environments, familiarity of the story requester, coaxing cues, stimulus structure, and presence of such props as dolls and toys. Results indicate that current methods are not fully capable of eliciting a story that is fully representative of a preschool language disordered child's story schema. (PB)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED319160

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

THE CHALLENGE OF COLLECTING STORIES FROM LANGUAGE DISABLED PRESCHOOL CHILDREN

Natalie L. Hedberg. Ph.D., Catherine E. Curran, M. S.,
and Christine Yoshinaga-Itano, Ph.D.

University of Colorado, Boulder, CO

American Speech-Language-Hearing Convention
St. Louis - November 1989

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Natalie L Hedberg
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Considerable attention has been directed towards developmental analysis of story structure and organization (Applebee, 1978; Botvin & Sutton-Smith, 1977; and Kemper, 1984.) However, only a few researchers have examined the efficacy of different story collection procedures with normally developing preschool populations (Cook-Gumperz and Green, 1984; Pellegrini and Galda, 1988; and Preece, 1986), none with preschool language disordered children.

Stories are the focus of the Child Language Center, an integrated preschool for language disordered and normally developing children at the University of Colorado. In our curriculum, "The Storybook Journey", children participate in activities involving nursery rhymes, songs and folk stories in a child-centered, play-based environment. This setting has provided the opportunity to pursue the challenge of obtaining stories that are most representative of a child's story construction abilities. The studies reported in this paper address this challenge.

The first variables we looked at were 1) the effect of the school versus the home environment and 2) the effect of stimuli structure. In the fall of 1988 we collected stories from six language disordered and ten normally developing children attending the Child Language Center. Our previous experiences had shown that children must have a minimum MLU of two before they can tell stories. Therefore, no attempt was made to elicit stories from four language delayed children with MLUs of less than two in our program. The language disordered subjects demonstrated moderate language and/or phonological deficits, generally with a delay of 6 to 18 months. As shown on Table 1, language disabled subjects had a mean age of 3;11 with a range of 3;3 to 5;8. Normal subjects had a mean age of 4;2 and a range of 3;5 to 4;11. Language disabled subjects' PPVT scores had a mean of 95 with a range of 82 to 114. The mean for normally developing subjects was 116 with a range from 102 to 128. These data are shown in Table 1.

The subjects were asked to tell four stories both at home and at school. The project was described to the children's parents during an orientation meeting. Parents who indicated an

EC 230 847

BEST COPY AVAILABLE

interest in participating were provided with procedures, stimuli and a tape recorder. Although 12 children's parents initially agreed to participate, only 7 actually attempted to collect stories. In school, stories were collected on audiotape during preschool hours by graduate students who worked regularly in the program and were familiar with the children. The students had been trained in the story collection procedures. Children were told that their student clinician would make a book of stories for them to illustrate and take home.

In both home and school environments subjects were encouraged to tell a story both "spontaneously" without stimuli and with stimuli. Three sets of stimuli varying in amount of structure were presented to the children in a counterbalanced order. There was a doll family - an unstructured stimulus; a single picture which provided a character, setting and theme - a partially structured stimulus; and a set of six DLM cards showing a cause-effect sequence of events - a highly structured stimulus.

Parents of 33% of our language disabled (2 of 6) and 50% of our normally developing children (5 of 10) attempted to collect stories at home (see table 2). None of the parents of language disabled children and 60% of the parents of normal children (3 of 5) who attempted to obtain stories succeeded in collecting stories using the designated procedures.

Students initially atempted to collect "spontaneous" stories in the classroom storybook corner. A tape recorder had been set up in the area. However, the high noise levels made tape recording difficult, so the project was moved to a room adjacent to the main classroom in the Child Language Center.

Students reported that almost half of the subjects initially refused to tell stories in the school setting. However, with coaxing and repeated requests, stories were collected from 13 of the 16 subjects. Table 3 shows the percentage of subjects who eventually told stories when presented each of the four stimulus conditions at school. A third of the language disabled children (2 of 6) told a story in the no stimulus condition while 83% (5 of 6) told stories in each of the other conditions. Seventy percent of the normal children (7 of 10) told stories in the no stimulus condition and 60% to 80% (6 to 8) told stories in the other three conditions.

The reticence of our children to tell stories in both home and school settings supported previous research findings by Guttman and Frederikson (1985) and Pellegrini and Galda (1988). These authors reported that young children frequently refused to tell stories in response to formal assessment procedures.

Ten children, five each from the language disordered and normal groups, told stories in response to the unstructured, partially structured and highly structured stimulus conditions in the preschool setting. The five normally developing children also told stories in the no stimulus condition in school. The stories collected by the parents were not included in the analyses.

The effect of stimulus structure on story length is shown in Table 4. No stimuli or unstructured stimuli generally resulted in

longer stories than partially structured and highly structured stimuli. An exception was that language disordered subjects told very brief stories when presented with the single picture stimulus. The stimulus condition had no effect on syntax level as measured by T-unit length. Language disordered children told stories reflecting lower productivity and syntax levels than did their normally developing peers.

Applebee's Narrative Levels Analysis (1978) was used to study the children's story organization. Applebee (1978) identified two organizational strategies used by preschool children in constructing stories: centering and chaining. Centering relates statements to a nucleus or core. The core element is usually a character, although it can be an action or a particular scene. Chaining occurs when a temporal or causal chain of events is presented. Applebee identified six stages of development in preschool children. The stages reflect the progressively more complex use of thematic centering and event chaining in story constructions.

The effect of stimulus structure on narrative level is shown in Table 5. Language disordered children told stories without temporal and causal relations when presented with unstructured and partially structured stimuli. Their stories contained unrelated or loosely connected action statements characteristic of Applebee's lowest narrative levels one and two. When presented with highly structured stimuli, the DLM sequence cards, their story organization improved to level three. At this level stories contain basic causal relations but lack temporal organization. Event chaining becomes apparent at level four; levels five and six reflect consistent use of temporal and causal connections.

The normal children told stories both with and without stimuli that reflected greater narrative organization than the stories of the language disordered children. As can be seen in Table 5, the no stimulus condition resulted in a narrative level mean (3.1) equivalent to the language disordered children's mean for the most highly structured condition. As the amount of structure in the stimulus condition increased, the mean narrative level of the normal children's stories increased from 3.1 to 5.0 The range of narrative levels for stories told by both groups varied widely.

This study confirmed our earlier experiences of difficulty in eliciting stories in the preschool classroom, both within the main classroom and in an adjacent room. Familiarity either of the persons requesting the story or of the environments was not sufficient to ensure the telling of a story by verbal children, regardless of their language status.

The effect of stimulus structure was similar to earlier findings with aphasic adults (Bottenberg, Lemme, and Hedberg, 1987). Better story organization occurred in response to more highly structured stimuli.

In the fall of 1989 we decided to try a different approach to story collection. As part of our beginning-of-the-school-year activities, we scheduled each of the 19 verbal preschool children

for story assessment by the second author. She was unknown to most of the children. The stories were collected at off-school hours in a room separate from the Child Language Center in our clinic. Subjects were asked to tell a story when preented with two sets of stimuli: the doll family and the doll family in a kitchen setting. The kitchen was included to provide children with additional structure around which to organize their stories. If neither of these stimuli were effective in eliciting a story, a variety of other toys were suggested as a source for a story topic. With some coaxing, none of the children refused to tell at least one story. The original stimuli were equally effective in eliciting stories from the 11 normal children as shown in Table 6. Ninety-one percent (10 of 11) told stories in both stimulus conditions. The eight language disordered children had a small preference for the doll family alone (88% or 7 of 8) over the doll family in the kitchen (75% or 6 of 8). Analysis of the stories collected in the fall of 1989 has not been completed yet.

Our experiences and analyses suggest a number of variables that should be considered by speech-language pathologists when collecting stories from preschool children with impaired language abilities. The first is environment. Familiarity of environment did not assure willingness to comply with the request to tell a story. To the contrary; expectations as to what usually occurs in school or at home and a multitude of distractions or choices directed the children's attention elsewhere. These children complied more readily in an unfamiliar environment.

Familiarity of the story requester also did not seem to carry much weight. However, coaxing did help.

Presence of a stimulus and the amount of structure in the stimulus had a marked effect. Language disabled children rarely told stories when no stimulus was provided. They consistently labeled and described when presented with unstructured and partially structured stimuli. Several of the language disordered children told stories containing causal and temporal relations when presented with the DLM picture sequence. However, the causal and temporal connections included in these stories were explicitly pictured in the stimulus materials. Thus, stories told in response to highly structured stimuli must be interpreted with the stimuli in mind. These stories may include organizational patterns that reflect simple descriptive strategies rather than more complex narrative organizational schema.

Unlike their normally developing peers, language impaired subjects tended to manipulate and play silently with the doll family and kitchen furniture. This appeared to be a prerequisite to telling a story.

An important question to consider is the amount of verbal support to provide. Probe questions such as "What happened next?" have been used successfully to collect stories from normally developing preschool children (Pellegrini and Galda, 1988 and Preece, 1986). Our objective was to assess a child's ability to organize narrative information independently. Therefore, we provided only nonverbal reinforcement and verbal prompts such as

"Is there more story?"

We are not satisfied yet that we know how to elicit a story that is truly representative of a preschool language disordered child's story schema. However, we have shed some light on the issue and continue to pursue this challenge.

References

Applebee, A.N., The Child's Concept of Story. Chicago: University of Chicago Press, 1978.

Botvin, G. and Sutton-Smith, B. The Development of Structural Complexity in Children's Fantasy Narratives. Developmental Psychology, 13, 377-388.

Cook-Gumperz, J.C. and Green, J.L. A Sense of Story: Influences on Children's Storytelling Ability. In D. Tannan (Ed.), Coherence in Spoken and Written Discourse. Norwood, N.J.: Ablex Publishing Corp., 1984.

Guttman M. and Frederikson, C.H. Preschool Children's Narratives: Linking Story Comprehension, Production and Play Discourse. In L. Galda and A.D. Pellegrini (Eds.), The Development of Children's Literate Behavior, Norwood, N.J.: Ablex Publishing Corp., 1985.

Kemper, S. The Development of Narrative Skills: Explanations and Entertainments. In S.A. Kuczaj (Ed.), Discourse Development: Progress in Cognitive Development Research. New York: Springer-Verlag, Inc., 1984.

Lemmee, M.L., Hedberg, N.L. and Bottenberg, D.E., Cohesion in Narratives of Aphasic Adults. In R. Brookshire (Ed.), Proceedings of Clinical Aphasiology Conference. Minneapolis: BRK Press, 1985, 241-247.

Pellegrini, A.D. and Galda, L., The Effects of Age and Context on Children's Use of Narrative Language. Research in the Teaching of English, 22 (2), May, 1988.

Preece, A., The Development of Young Children's Productive Narrative Competence in Conversational Contexts: A longitudinal Investigation. Unpublished doctoral dissertation, University of Victoria, Canada, 1986.

Table 1: SUBJECT CHARACTERISTICS

	LD (6)	N (10)
Age:		
Mean	3;11	4;2
Range	3;3-5;8	3;5-4;11
PPVT		
Mean	95	116
Range	82-114	102-128

Table 2: PERCENTAGE OF PARENTS WHO OBTAINED STORIES FROM THEIR CHILDREN AT HOME

	LD (6)	N (10)
Parents who attempted task	33%	50%
Parents of these obtaining stories	0%	60%

Table 3: PERCENTAGE OF SUBJECTS WHO TOLD STORIES IN EACH STIMULUS CONDITION

	LD (6)	N (10)
No stimuli	33%	70%
Unstructured (doll family)	83%	60%
Partially structured (boy with ice cream)	83%	80%
Highly structured (DLM sequence cards)	83%	70%

Table 4: EFFECT OF STIMULI ON PRODUCTIVITY

	Total Words Per Story	
	LD (5)	N (5)
No Stimuli		114
Unstructured (doll family)	59	115
Partially structured (boy with ice cream)	29	79
Highly structured (DLM sequence)	43	73

Table 5: EFFECT OF STIMULI ON NARRATIVE LEVEL

	LD (5)		N (5)	
	mean	range	mean	range
No stimuli			3.1	1-5
Unstructured (doll family)	1.5	1-2.5	3.7	1-6
Partially structured (boy dropping ice cream)	1.4	1-2	4.8	2-6
Highly structured (DLM sequence)	3.1	2-5	5.0	3-6

Table 6: PERCENTAGE OF SUBJECTS WHO TOLD STORIES WHEN PRESENTED EACH STIMULUS CONDITION

	LD (8)	N (11)
Doll family	88%	91%
Doll family plus kitchen	75%	91%